



BACKGROUND OF THE INVENTION

The government owns rights in the present invention pursuant to grant number
5 SR29DE11689-04 from the National Institutes of Health and grant number
5 SP50DE11906-03 from the National Institutes of Dental and Craniofacial Research. The
application claims benefit of priority to U.S. Provisional Application U.S. Serial No.
60/215,491, the entire contents of which is hereby incorporated by reference.

1. Field of the Invention

10 The present invention relates generally to the fields of cellular and molecular
biology. More particularly, it concerns the use of peptides that targets tumor tissue and
describes methods to achieve targeted delivery of anticancer drugs using this peptide.
The invention also contemplates methods for using the peptide for the diagnosis and
imaging of cancer.

2. Description of Related Art

A. Cancers

15 Cancer is one of the leading causes of disease, being responsible for 526,000
deaths in the United States each year. In 1998, the American Cancer Society estimated
20 that 60,000 Americans would be diagnosed with head and neck cancer. Head and neck
cancer is the term given to a variety of malignant tumors that may occur in the head and
neck region: the oral cavity (including the tissues of the lip or mouth such as the tongue,
the gums, the lining of the cheeks and lips, the bottom of the mouth, the hard and soft
palate and the retromolar trigone); the pharynx (including the hypopharynx, nasopharynx
25 and oropharynx, also called the throat); paranasal sinuses (including the frontal sinuses
above the nose, the maxillary sinuses in the upper part of either side of the upper
jawbone, the ethmoid sinuses just behind either side of the upper nose, and the sphenoid
sinus behind the ethmoid sinus in the center of the skull) and nasal cavity; the larynx
(also called the voicebox); thyroid gland (including cancers of the thyroid which are
30 papillary, follicular, medullary and anaplastic); parathyroid gland; salivary glands
(including the major clusters of salivary glands found below the tongue, on the sides of
the face just in front of the ears, and under the jawbone); lesions of the skin of the face

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The claim of this patent contains at least one drawing executed in color.